Abstract of the Disclosure

A magnetically enhanced convection heat sink comprises a heat sink member for dissipating heat from a heat source. A magnetic source creates a magnetic field concentrated at a first location, the intensity of the magnetic field decreasing from the first location to a second location. The heat sink member is positioned within the magnetic field and in a gas flow path between the first and second locations. Gas, having paramagnetic properties, entering the heat sink at the first location is heated by the heat sink member, and as the gas becomes warmer is displaced by cooler gas causing the warmer gas to move toward the second location as it is further heated by the heat sink.